

Amendments to the Claims:

Please cancel claims 1-16, 23 and 24. Please also amend claims 17, 18, 20-22 as noted in the listing below, and add new claims 26-44 as indicated in the listing. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Cancel claims 1-16

17. (currently amended) An apparatus comprising:

a wireless transceiver to send and receive a data packets of X length via wireless communications;

a network interface card coupled to said wireless transceiver, said network interface card to connect to another wireless device to form a wireless local area network; and

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firmware comprising control logic to calculate a packet error ratio (PER) value for said data packets, check whether said PER value is within an acceptable level, determine whether an intermittent [noise] interference is affecting said PER value, and step up data transfer rate at which [said] future data packets [is] are to be transmitted if said PER value is [less] greater than a [raise] drop rate threshold and [said] if an intermittent [noise] interference is detected is due to a frequency hopping spread spectrum (FHSS) device.

18. (currently amended) The apparatus of claim 17 wherein said control logic is to

further determine whether said intermittent [noise] interference is due to [said] a frequency hopping spread spectrum (FHSS) wireless device.

19. (original) The apparatus of claim 18 wherein said FHSS wireless device is a Bluetooth device.

20. (currently amended) The apparatus of claim [19] 17 wherein said apparatus is a 802.11(b) protocol compatible wireless device.

21. (currently amended) The apparatus of claim [20] 17 wherein said control logic is further to [further] step down said [bit] transfer rate at which said future data packets [is] are to be transmitted if said PER value is greater than a drop rate threshold.

22. (currently amended) The apparatus of claim 21 wherein said control logic is to further step down said [bit] transfer rate if [said] a constant [intermittent] noise is [caused by a non-FHSS source] detected.

Cancel claims 23-25.

26. (new) The method of claim 22, wherein said control logic is further to step down the data transfer rate only if the current data rate is greater than a lowest data rate.

27. (new) The method of claim 17, wherein said control logic is further to step up the data transfer rate at which future data packets are to be transmitted only if the current data rate is less than a highest data rate.

28. (new) The method of claim 17, wherein said future data packets are of length X.

29. (new) A method comprising:

determining a packet error ratio for transmissions of packets of X length, at a current transmission rate, between two DSSS devices through a wireless channel;

if the packet error ratio is above a predefined threshold, detecting if intermittent interference is present on the wireless channel; and

if intermittent interference is detected, increasing the transmission rate for the wireless channel while maintaining the packet length.

30. (new) The method of claim 29, wherein increasing the transmission rate further comprises:

determining if the current transmission is the highest of a predefined set of transmission rates; and

if the current transmission rate is not the highest of the predefined transmission rates, increasing the transmission rate for the wireless channel.

31. (new) The method of claim 29, further comprising:

if the current transmission rate is the highest of the predefined transmission rates, maintaining the current transmission rate.

32. (new) The method of claim 29, further comprising:

if intermittent interference is not detected, determining if a constant noise is present on the wireless channel; and

if so, decreasing the transmission rate for the wireless channel.

33. (new) The method of claim 31, wherein:

decreasing the transmission rate further comprises decreasing the transmission rate while maintaining the packet length.

34. (new) A method, comprising:

employing a step-down algorithm to decrease the transmission rate for packets across a direct-sequence spread spectrum (“DSSS”) wireless channel in the presence of interference; and

declining to decrease the transmission rate if the interference is intermittent.

35. (new) The method of claim 34, further comprising:

increasing the transmission rate if the interference is intermittent.

36. (new) The method of 34, wherein:

the step-down algorithm is further to decrease the transmission rate for the DSSS wireless channel while maintaining packet length.

37. (new) The method of claim 35, wherein:

increasing the transmission rate further comprises increasing the transmission rate while maintaining packet length.

38. (new) The method of claim 34, further comprising:

increasing the transmission rate if return signal strength indicator values for previously transmitted packets indicate strong signal strength.

39. (new) The method of claim 34, wherein:

said step-down algorithm is to incrementally decrease transmission rate from a higher one of a set of predetermined transmission rates to a lower one of the predetermined transmission rates.

40. (new) The method of claim 39, wherein said predetermined transmission rates further comprise:

11 Mb/s, 5.5 Mb/s, and 2 Mb/s.

41. (new) The method of claim 35, wherein:

increasing the transmission rate further comprises incrementally increasing the transmission rate from a lower one of a set of predetermined transmission rates to a higher one of the predetermined transmission rates.

42. (new) The method of claim 41, wherein said predetermined transmission rates further comprise:

11 Mb/s, 5.5 Mb/s, and 2 Mb/s.

43. (new) A machine readable medium having embodied thereon a computer program, said computer program being executable by a machine to perform a method comprising:

determining a packet error ratio for transmissions of packets of X length, at a current transmission rate, between two DSSS devices through a wireless channel;

if the packet error ratio is above a predefined threshold, detecting if intermittent interference is present on the wireless channel; and

if intermittent interference is detected, increasing the transmission rate for the wireless channel while maintaining the packet length.

44. (new) The machine readable medium of claim 43, wherein the computer program is further executable by a machine to:

determine if the current transmission is the highest of a predefined set of transmission rates; and

if the current transmission rate is not the highest of the predefined transmission rates, increase the transmission rate for the wireless channel